CLAIM LISTING

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A glazing panel having dimensions of at least 40 cm by 30 cm comprising

a first glass sheet having a thickness within the range 1.5 mm to 14 mm

a second glass sheet, spaced from the first glass sheet and having a thickness within the range 1.5 mm to 14 mm,

an interlayer adhered between the first and second glass sheets so as to form a laminated assembly, the interlayer being selected from a polyvinyl butyral (PVB) based material and an ethylvinylacetate (EVA) based material characterised in that

the interlayer has a maximum heat release rate of less than 650 kW/m² and in that the glazing panel has a mechanical resistance rating of at least 2B2 in a pendulum test according to European standard EN12600.

2. (Original) A glazing panel in accordance with claim 1, in which the glazing panel further comprises

a third glass sheet having a thickness within the range 1.5 mm to 14 mm spaced from the second glass sheet; and

an intumescent layer positioned between the second and the third glass sheets.

3. (Original) A glazing panel in accordance claim 1, in which the glazing panel comprises

at least three substrates adhered together by means of interlayers to form a laminated assembly, the glazing panel having a fire rating of at least EI30 and a bullet resistance of at least class BR3 according to European standard EN1063 .

4. (Original) A glazing panel consisting essentially of

a first, non-wired glass sheet,

a second, non-wired glass sheet, the second glass sheet being spaced from the first glass sheet without an intervening intumescent material

an interlayer adhered between the first and second glass sheets so as to form a laminated assembly, the interlayer being selected from a polyvinyl butyral (PVB) based material and an ethylvinylacetate (EVA) based material

a third, non-wired glass sheet having a thickness within the range 1.5 mm to 14 mm and having a surface compression at a central portion of at least 80 MPa., spaced from the second glass sheet by a sealed gas filled space,

with optional coatings on one or more of the glass sheets,

the glazing panel having a fire rating of at least EW60 when the first glass sheet is exposed to a heat source in a fire test.

5. (Original) A glazing panel in accordance with of claim 4, in which the glazing panel has one of the following characteristics

a) the glazing panel has dimensions of at least 40 cm by 30 cm;

b) the glazing panel has dimensions of at least 40 cm by 30 cm and consists essentially of the structure first glass sheet/interlayer/second glass sheet/solar control coating layer/spacing/infra red reflecting layer/third glass sheet with each of the glass

sheets having a thickness in the range 3 mm to 7 mm, and the third glass sheet having a surface compression at a central portion of at least 80 MPa;

c) the glazing panel has dimensions of at least 40 cm by 30 cm and consists essentially of the structure first glass sheet/interlayer/second glass sheet/solar control coating layer/spacing/third glass sheet with each of the glass sheets having a thickness in the range 3 mm to 7 mm, and the third glass sheet having a surface compression at a central portion of at least 80 MPa;

d) the glazing panel has dimensions of at least 40 cm by 30 cm and consists essentially of the structure infra red reflecting layer/first glass sheet/interlayer/second glass sheet/ spacing/ solar control coating layer/third glass sheet with each of the glass sheets having a thickness in the range 3 mm to 7 mm, and the third glass sheet having a surface compression at a central portion of at least 80 MPa

e) the glazing panel has a surface area of greater than or equal to 0.8 m^2 and consists essentially of the structure /first glass sheet/interlayer/second glass sheet/ infra red reflecting layer/spacing/third glass sheet/infra red reflecting coating with each of the glass sheets having a thickness in the range 5.5 mm to 16.5 mm and each glass sheet having a surface compression at a central portion of at least 80 MPa

f) the glazing panel has dimensions of at least 40cm by 30cm and consists essentially of the structure infra red reflecting layer/first glass sheet/spacing/infra red reflecting layer/second glass sheet/ interlayer/third glass sheet with the first glass sheet having a thickness between 5.5 mm and 6.5 mm, the second glass sheet having a thickness

between 5.5mm and 6.5mm, the third glass sheet having a thickness between 11.5mm and 12.5mm and each of the glass sheets having a surface compression at a central portion of at least 80 MPa

g) the glazing panel has dimensions of at least 40cm by 30cm and consists essentially of the structure infra red reflecting layer/first glass sheet/spacing/ /second glass sheet/ interlayer/ infra red reflecting layer/ third glass sheet with the first glass sheet having a thickness between 5.5 mm and 6.5 mm, the second glass sheet having a thickness between 11.5mm and 12.5mm, the third glass sheet having a thickness between 5.5mm and 6.5mm and each of the glass sheets having a surface compression at a central portion of at least 80 MPa

h) the glazing panel has dimensions of at least 40cm by 30cm and consists essentially of the structure infra red reflecting layer/first glass sheet/spacing/ /second glass sheet/ interlayer/ infra red reflecting layer/ third glass sheet with the first glass sheet having a thickness between 5.5 mm and 6.5 mm, the second glass sheet having a thickness between 5.5mm and 6.5mm, the third glass sheet having a thickness between 9.5mm and 13.5mm and each of the glass sheets having a surface compression at a central portion of at least 80 MPa

6. (Original) A glazing panel having dimensions of at least 1m by 2.2m and a fire rating of at least EW60 in which the glazing panel consists essentially of the structure of a first glass sheet, the first glass sheet having a thickness within the range 2.5 mm to 8.5 mm a second glass sheet, the second glass sheet having a thickness within the range 2.5 mm to 8.5 mm, spaced from the first glass sheet

an interlayer adhered between the first and second glass sheets so as to form a laminated assembly

at least one face of each of the glass substrates being provided with a coating layer having a normal emissivity of less than 0.3.

7. (Original) A glazing panel in accordance with claim 6, in which an internal face of each of the glass sheets, adjacent to the interlayer, is provided with an infra red reflecting layer.

8. (Original) A glazing panel in accordance with claim 6, in which an exposed face of each of the glass sheets, spaced from the interlayer, is provided with an infra red reflecting coating.

9. (Original) A glazing panel having dimensions of at least 40 cm by 30 cm, having a fire rating of at least EW30 and a mechanical resistance of at least 2B2 in a pendulum test according to European standard EN12600, in which the glazing panel has one of the following characteristics

a) the glazing panel consists essentially of the structure of a first glass sheet having a thickness within the range 1.5 mm to 4.5 mm the first glass sheet being selected from the group consisting of glass having an expansion coefficient less than or equal to 9×10^{-6} and glass having a Tg greater than or equal to 580°C a second glass sheet having a thickness within the range 1.5 mm to 4.5 mm, the second glass substrate being selected from the group consisting of soda lime glass, glass having an expansion coefficient less than or equal to 9×10^{-6} and glass having a Tg greater than or equal to 580°C

and an interlayer adhered between the first and second glass sheets so as to form a laminated assembly, the interlayer being selected from a polyvinyl butyral (PVB) based material and an ethylvinylacetate (EVA) based materials first sheet

b) the glazing panel consisting essentially of a first, non-wired glass sheet having a thickness within the range 1.5 mm to 2.5 mm, a second, non-wired glass sheet having a thickness within the range 1.5 mm to 2.5 mm, the second glass sheet being spaced from the first glass sheet an interlayer adhered between the first and second glass sheets so as to form a laminated assembly, the interlayer being selected from a polyvinyl butyral (PVB) based material and an ethylvinylacetate (EVA) based material a third, non-wired glass sheet having a thickness within the range 1.5 mm to 2.5 mm spaced from the second glass sheet by a an intervening, intumescent layer.

10. (Currently Amended) A glazing panel having dimensions of at least 40 cm by 30 cm and having ~~at least~~ one of the following characteristics

a) the glazing panel has a fire rating of at least EW30 and consists essentially of the structure first glass sheet/interlayer/second glass sheet/intumescent layer/third glass sheet with each of the glass substrates having a thickness in the range 1.5 mm to 4 mm

b) the glazing panel has a fire rating of at least EW60 and consists essentially of the structure first glass sheet/interlayer/second glass sheet/intumescent layer/third glass sheet with each of the glass substrates having a thickness in the range 2.5 mm to 4.5 mm

c) the glazing panel has a fire rating of at least EW60 and consists essentially of the structure first glass sheet/interlayer/second glass sheet/intumescent layer/third glass sheet/interlayer/fourth glass sheet with each of the glass sheets having a thickness in the range 1.5 mm to 4.5 mm

d) the glazing panel has a fire rating of at least EI90 and consists essentially of the structure glass sheet/intumescent layer/ glass sheet/intumescent layer/glass sheet/ intumescent layer/glass sheet/interlayer/ glass sheet/intumescent layer/ glass sheet/intumescent layer/glass sheet/ intumescent layer/glass sheet with each of the glass sheets having a thickness in the range 1.5 mm to 4.5 mm

e) the glazing panel has a fire rating of at least EI120 and consists essentially of the structure glass sheet/intumescent layer/ glass sheet/intumescent layer/glass sheet/ intumescent layer/glass sheet/interlayer/ glass sheet/intumescent layer/ glass sheet/intumescent layer/glass sheet/ intumescent layer/glass sheet/ interlayer/ glass sheet/intumescent layer/ glass sheet/intumescent layer/glass sheet/ intumescent layer/glass sheet with each of the glass sheets having a thickness in the range 1.5 mm to 4.5 mm

f) the glazing panel has a fire rating of at least E30 and consists essentially of the structure glass sheet/interlayer/glass sheet/sealed gas filled separation/glass sheet/intumescent layer/glass sheet with each of the glass sheets having a thickness in the range 2.5 mm to 3.5 mm

g) the glazing panel has a fire rating of at least E30 and consists essentially of the structure glass sheet having a thickness in the range 2.5 mm to 4.5 mm /interlayer/glass sheet having a thickness in the range 3.5 mm to 4.5 mm /low emissivity coating/sealed gas filled separation/glass sheet having a thickness in the range 2.5 mm to 3.5 mm /intumescent layer/glass sheet having a thickness in the range 2.5 mm to 3.5 mm

h) the glazing panel has a fire rating of at least E30 and consists essentially of the structure glass sheet having a thickness in the range 5.5 mm to 6.5 mm /low emissivity coating/interlayer/glass sheet having a thickness in the range 2.5 mm to 3.5 mm /sealed gas filled separation/glass sheet having a thickness in the range 2.5 mm to 3.5 mm /intumescent layer/glass sheet having a thickness in the range 2.5 mm to 3.5 mm;

11. (Currently Amended) A glazing panel in accordance with claim 3 ~~or claim 10~~, in which the intumescent layer comprises Silica (SiO2) and Sodium Oxide (Na2O) and in which the ratio Rp of Si02/Na2O by weight is greater than 3.3.

12. (Currently Amended) A glazing panel in accordance with ~~any one of claims 3, 10 and 11~~ claim 11, in which the water content of the intumescent layer is less than or equal to 22% by weight.

13. (Currently Amended) A glazing panel in accordance with ~~any preceding~~ claim 1, in which the glazing panel has a fire rating of at least EW30.

14. (Currently Amended) A glazing panel in accordance with ~~any preceding~~ claim 1, in which at least one of the glass sheets is a soda lime glass.

15. (Currently Amended) A glazing panel in accordance with ~~any preceding~~ claim 1, in which at least one of the glass sheets is selected from the group consisting of glass having an expansion coefficient less than or equal to 9×10^{-6} and glass having a Tg greater than or equal to 580°C.

16. (Currently Amended) A glazing panel in accordance with ~~any preceding~~ claim 1, in which at least one of the glass sheets has a surface compression at a central point of at least 80 MPa.

17. (Currently Amended) A glazing panel in accordance with ~~any preceding~~ claim 4, in which the interlayer has a maximum heat release rate of less than 650 kW/m²

18. (Currently Amended) A glazing panel in accordance with ~~any preceding~~ claim 1, in which the interlayer has a maximum heat release rate of less than 500 kW/m².

19. (Currently Amended) A glazing panel in accordance with ~~any preceding~~ claim 4, in which the glazing panel has a mechanical resistance rating of at least 2B2 in a pendulum test according to European standard EN12600.

20. (Currently Amended) A glazing panel in accordance ~~any preceding~~ with claim 1, in which at least one of the glass sheets is provided with a solar control coating or heat reflective coating.

21. (Currently Amended) A glazing panel in accordance with ~~any preceding~~ claim 1, in which the glazing panel has a light transmission greater than or equal to 60 % and a solar factor less than or equal to 55 %.

22. (Currently Amended) A glazing panel in accordance with ~~any preceding~~ claim 4, in which the glazing panel has dimensions of at least 95 cm by 190 cm

23. (Currently Amended) A glazing panel in accordance with ~~any preceding~~ claim 1, in which the glazing panel has a total ultra violet light transmittance of less than 1% measured according to European standard EN410.

17. (Currently Amended) A glazing panel in accordance with ~~any preceding~~ claim 4, in which the interlayer has a maximum heat release rate of less than 650 kW/m²

18. (Currently Amended) A glazing panel in accordance with ~~any preceding~~ claim 1, in which the interlayer has a maximum heat release rate of less than 500 kW/m².

19. (Currently Amended) A glazing panel in accordance with ~~any preceding~~ claim 4, in which the glazing panel has a mechanical resistance rating of at least 2B2 in a pendulum test according to European standard EN12600.

20. (Currently Amended) A glazing panel in accordance ~~any preceding~~ with claim 1, in which at least one of the glass sheets is provided with a solar control coating or heat reflective coating.

21. (Currently Amended) A glazing panel in accordance with ~~any preceding~~ claim 1, in which the glazing panel has a light transmission greater than or equal to 60 % and a solar factor less than or equal to 55 %.

22. (Currently Amended) A glazing panel in accordance with ~~any preceding~~ claim 4, in which the glazing panel has dimensions of at least 95 cm by 190 cm

23. (Currently Amended) A glazing panel in accordance with ~~any preceding~~ claim 1, in which the glazing panel has a total ultra violet light transmittance of less than 1% measured according to European standard EN410.

24. (Currently Amended) A glazing panel in accordance with ~~any preceding~~ claim 10, in which each ~~and any~~ intumescent layer, if present, has a thickness of less than or equal to 2mm.

25. (New) A glazing panel in accordance with claim 10, in which the intumescent layer comprises Silica (SiO2) and Sodium Oxide (Na2O) and in which the ratio Rp of Si02/Na2O by weight is greater than 3.3.

26. (New) A glazing panel in accordance with claim 3, in which the water content of the intumescent layer is less than or equal to 22% by weight.

27. (New) A glazing panel in accordance with claim 10, in which the water content of the intumescent layer is less than or equal to 22% by weight.